

PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the reconstruction of an existing Traffic Control Signal with street lighting at the intersection of MD 151 (North Point Blvd) and Wise Avenue and the installation of detectors as well as signal cable rerouting at the intersection MD 151 (North Point Blvd) and Morse Lane / I-695 Off Ramp "F". These modifications are due to geometric improvements in this area. Both intersections are in Baltimore County. MD 151 (North Point Blvd) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

MD 151 (North Point Blvd) at Wise Avenue

- The intersection is to operate in a NEMA six-phase, fully-actuated mode, with the MD 151 (North Point Blvd) approaches running concurrently. Exclusive left turn phases shall be provided for both approaches of MD 151 (North Point Blvd). A right turn phase shall be provided for the eastbound approach of Wise Avenue. The Wise Avenue approaches shall also run concurrently.

- A full-traffic-actuated, eight-phase controller with three (3) four channel, rack mount loop detector amplifiers and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

MD 151 (North Point Blvd) at Morse Lane / I-695 Off Ramp "F"

- The intersection shall continue to operate in a NEMA four-phase, fully-actuated mode, with the MD 151 (North Point Blvd) approaches running concurrently. The Morse Lane / I-695 Off Ramp "F" approaches shall also continue to run concurrently.
- The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.

MD 151 (North Point Blvd) at Station 123+49 63'RT

- The existing base-mounted cabinet and foundation shall be removed (abandoned sampling station).

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- Upon completion of this project, the Contractor shall notify Mr. Robert Snyder at (410) 787-7631 to arrange for the phone line installation. The Contractor is to provide Mr. Robert Snyder with the nearest street address, zip code and phone number.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A.

CAT. CODE	DESCRIPTION	QUANTITY
973023	Flat sheet aluminum signs	34 SF
	D3-2 "North Pt Blvd" dual faced sign, (variable x 16") mast arm mounted.	1 EA
	D3-2 "Wise Ave" dual faced sign, (variable x 16") mast arm mounted.	1 EA
	R3-5R "RIGHT TURN ONLY" (30"x36") mast arm mounted.	1 EA
	R10-12 "LEFT TURN YIELD ON GREEN (BALL)" sign, (36" x 42") mast arm mounted.	1 EA
973023	Flat sheet aluminum signs	35.5 SF
	GUIDE SHIELD ASSEMBLY (48"x75") pole mounted.	1 EA
	M3-1 "NORTH" (30"x15")	
	M1-5 "MD 151" (48"x36")	
	M6-1 "left arrow" (30"x24")	
	GUIDE SHIELD ASSEMBLY (30"x51") pole mounted.	1 EA
	M3-3 "SOUTH" (24"x12")	
	M1-5 "MD 151" (30"x24")	
	M6-1 "right arrow" (21"x15")	
973023	Eight-phase, full-traffic actuated, solid state digital controller with three 4-channel, rack mount loop detector amplifiers and phone drop housed in a NEMA size "6" base mounted cabinet.	1 EA

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

CAT. CODE	DESCRIPTION	QUANTITY
120500	Maintenance traffic	LUMP SUM
203030	Test pit excavation	3 CY
585624	24" white heat applied permanent preformed thermoplastic pavement marking	160 LF
800000	Pull back and re route electrical cable.	600 LF
800000	Remove and dispose of existing equipment	LUMP SUM
800000	1" PVC weatherhead	1 EA
801004	Furnish and install concrete for signal foundation.	12 CY
802501	Furnish and install No. 6 AWG stranded bare copper ground wire.	275 LF
805011	Furnish and install 1" electrical conduit - galvanized sleeve.	165 LF
805025	Furnish and install 1" PVC riser.	30 LF
805115	Furnish and install 3" schedule 80 rigid PVC conduit - bored.	455 LF
805118	Furnish and install 4" schedule 80 rigid PVC conduit - bored.	245 LF
805125	Furnish and install 2" schedule 40 rigid PVC conduit - trenched.	65 LF
805135	Furnish and install 3" schedule 80 rigid PVC conduit - trenched.	865 LF
805140	Furnish and install 4" schedule 80 rigid PVC conduit - trenched.	80 LF
805160	Furnish and install 1" liquid tight flexible non-metallic conduit for detector sleeve.	20 LF
807400	Electrical utility service equipment 120/240 volts, 60 amps	1 EA
810550	Furnish and install micro loop probe set with 500' lead-in	4 EA
810555	Furnish and install micro loop probe set with 1000' lead-in	2 EA
810601	Furnish and install non-invasive probe set with 500' lead-in cable	2 EA
811001	Furnish and install electrical handhole	13 EA
813015	Install overhead sign.	69.5 SF
818051	Furnish and install 27' steel pole and twin 50'/70' mast arms	2 EA
831010	Furnish and install 250 watt HPS lamp and luminaire	2 EA
837001	Furnish and install ground rod - 3/4" diameter x 10' length	3 EA
860270	Furnish and install 8" vehicular traffic signal head section - polycarbonate	9 EA
860272	Furnish and install 12" vehicular traffic signal head section - polycarbonate	39 EA
861104	Furnish and install electrical cable - 2 conductor (aluminum shielded)	515 LF
861107	Furnish and install electrical cable - 5 conductor (No. 14 AWG)	820 LF
861108	Furnish and install electrical cable - 7 conductor (No. 14 AWG)	1605 LF
861116	Furnish and install electrical cable 2 conductor No. 12 AWG copper type T/C	355 LF
862101	Furnish and install loop wire encased in flexible tubing (No. 14 AWG)	3190 LF
862102	Furnish and install saw cut for signal (loop detector)	800 LF
871117	Install eight phase (fully actuated) controller and cabinet - base mount.	1 EA

C. EQUIPMENT TO BE REMOVED

SHA forces shall remove the controllers and all auxiliary equipment from the controller cabinets. The cabinets and all other materials to be removed by the contractor shall become property of the contractor.

The contact persons for District #4 are as follows:

Mr. Randall Scott
Assistant District Engineer - Traffic
Phone: (410) 321-2781

Assistant District Engineer - Maintenance
Phone: (410) 321-2761

Assistant District Engineer - Utility
Phone: (410) 321-2841

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

The power company representative is:

Mr. Keith Ernest
Baltimore Gas and Electric
7317 Parkway Drive South
Hanover, Maryland 21076
410- 859- 9047
WMS#



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION
1.) MD 151 (NORTH POINT BLVD.) AND WISE AVE
2.) MD 151 (NORTH POINT BLVD.) AND MORSE ROAD/
I-695 OFF RAMP "F"

DRAWN BY: *abd*
CHECKED BY: *abd*
SCALE: NONE
DATE: 8/30/02

F.A.P. NO.
S.H.A. NO. BA2785184
COUNTY: BALTIMORE
LOG MILE:

TS NO.
T.I.M.S. NO. C-904

SHEET NO.
OF